BRUHATH BENGALURU MAHANAGARA PALIKE

PROJECT MANAGEMENT AND CONSULTANTS

Name of Work: Improvements of roads and drains surrounding in ward no 10

Civil Aim Consultants & Engineers

(Buildings Geo-Test & Highway Materials Testing Laboratory)

An ISO 9001:2015 Certified Company

NABL Accredited As Per ISO/IEC 17025:2017 Laboratory

No.01, Satvika Nilaya,Opp.Widia Poorna Prajna School,Ramaiah Layout Nagasandra Bengaluru -560073.

CIVIL AIM CONSULTANTS & ENGINEERS

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Name of Work : Improvements of roads and drains surrounding in ward no 10

Name of Client	:	**Executive Engineer,** K R Pura Division, BBMP, Bangalore.
Contractor/Agency	:	**Sri. K. V. Subba Reddy,** Bangalore.
Est Cost	:	Rs. 100.00 Lakhs
Date of Inspection	:	08.02.2022
Status of Bill	:	1st and Final Bill
In the Presence of	:	(a) **Assistant Engineer (ward No.10),** BBMP, Bangalore.
	:	(b) **Mr. Prajwal,** Engineer
		M/s. Civil Aim Consultants & Engineers, Bengaluru

AE-10

ASSISTANT EXECUTIVE ENGINEER
Vidyaranyapura Sub-Division
Bruhath Bengaluru Mahanagara Palike

Sl.No	Description of the Item		Comments / observations
1	Removing and resetting of footpath slab	:	Work done up to the billed quantity and Quality is satisfactory
2	Earthwork excavation by manual means in ordinary soil involving an average horizontal	:	Work done up to the billed quantity and Quality is satisfactory
3	KSRRB M2900- PCC 1:3:6 in Foundation KSRRB M2900-1. Plain cement concrete 1:3:6	:	Work done up to the billed quantity and Quality is satisfactory
4	Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix	:	Work done up to the billed quantity and Quality is satisfactory
5	KSRB 4-6.1 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete	:	Work done up to the billed quantity and Quality is satisfactory
6	KSRB 4-6.4 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including	:	Work done up to the billed quantity and Quality is satisfactory

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AC W 10

.01, Satvika Nilaya, Opp. Widia Poorna Prajna School,
maiah layout, Nagasandra, Bangalore - 560 073.
No: 9591618639 GST IN:29CNWPD9510K1ZB Email:civilaimconsultants@gmail.com

Sl.No	Description of the Item		Comments / observations
7	Providing and laying in Position Palin/ Reinforced cement concrete M-20 for Sub Structure/ Super Structure Works,in with cement @ 320 kg, 20mm & down size graded graniteMetal Coarse Aggrigate @ 0.69 cum and fine aggregates @ 0.46 cum, Machine Mixed with super plasticiser @ 3lts confirmingto IS-	:	Work done up to the billed quantity and Quality is satisfactory
8	Providing T.M.T steel reinforcement for R.C.C workincluding straightening, cutting, bending, hooking, placing in position,lapping and / or welding wherever required, tying with binding wire andanchoring to the adjoining members wherever necessary complete asper design (laps, hooks and wastage shall not be measured and	:	Work done up to the billed quantity and Quality is satisfactory
9	Providing granite slabs of selected quality roughly dressed having a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.	:	Work done up to the billed quantity and Quality is satisfactory
10	Providing one line dressing to granite stone slab / granite stone masonry as per specifications	:	Work done up to the billed quantity and Quality is satisfactory
11	Providing chamfering edges to stone slab 2.5 cms. wide as per specifications. (only chamfered length shall be recorded)	:	Work done up to the billed quantity and Quality is satisfactory
12	RCC Precast Cover Slab of 250mm thick providing and fixing precast reinforced cement concrete covering slabs of 25cm thick made out of M25 with OPC Cement @340kg/cum with 20mm and down size graded granite metal coarse aggregates at 0.70cum and fine	:	Work done up to the billed quantity and Quality is satisfactory
13	Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations	:	Work done up to the billed quantity and Quality is satisfactory

ASSISTANT EXECUTIVE ENGINEER

Sl.No	Description of the Item		Comments / observations
14	Excavation in Soil using Hydraulic Excavator CK 90 and Tippers with Disposal KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in	:	Work done up to the billed quantity and Quality is satisfactory
15	Construction of dry lean cement concrete mix CC1:5:10 with OPC cement @160Kgs, with 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @ 0.58cum Sub- base over a prepared sub-grade with (coarse and fine aggregate conforming to IS: 383) aggregate cement ratio	:	Work done up to the billed quantity and Quality is satisfactory
16	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement,	:	Work done up to the billed quantity and Quality is satisfactory
17	Vaccum de-watering with vaccum pump and suction mat and compaction with skin floater	:	Work done up to the billed quantity and Quality is satisfactory
18	Wet Mix Macadam - Providing, laying, spreading and compacting crushed stone	:	Work done up to the billed quantity and Quality is satisfactory
19	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and	:	Work done up to the billed quantity and Quality is satisfactory
20	Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH specification clause 501	:	Work done up to the billed quantity and Quality is satisfactory
21	KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of	:	Work done up to the billed quantity and Quality is satisfactory

Sunitha. N R
AE/JIO

CIVIL AIM CONSULTANTS & ENGINEERS

Sl.No	Description of the Item		Comments / observations
22	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled vibratory and tandem	:	Work done up to the billed quantity and Quality is satisfactory
23	KSRRB M500-19. Providing and laying bituminous concrete 40 mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and	:	Work done up to the billed quantity and Quality is satisfactory
24	Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per	:	Work done up to the billed quantity and Quality is satisfactory
25	Cost of Haulage including Loading and Unloading of Stone Boulder / Stone aggregates /Sand/ Kanker / Moorum. KSRRB M100-1 : Placing tipper at loading point, loading with front end loader,dumping, turning for return trip excluding time for haulage and return trip	:	Work done up to the billed quantity and Quality is satisfactory
E-1	Providing and constructing load bearing wall with solid concrete blocks having block density not less than 1800kg/m3 having a minimum average compressive strength of 4.00 N/rrim2 confirming to JS 2185 (Part 1):2005 and constructed with CM 1:4, as per IS 2572:2005 \ including cost of ail materials labour charges	:	Work done up to the billed quantity and Quality is satisfactory
E-2	Providing and constructing granite /trap/ baslat size stone masonry in foundation with cement mortar 1:6, stones hammerd dressed in courses not less than 20cms high, bond stones at two m. apart in each course including cost of materials labour curing complete as per	:	Work done up to the billed quantity and Quality is satisfactory

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Sl.No	Description of the Item		Comments / observations
E-3	Providing and fixing Precast RCC cover slabs of 100 mm thick for drain in cement concrete 1:1.5:3 using graded granite jelly 20mm and down size with steel reinforcement and pointing for joints 1:3 cement mortor including form work, lift charges,curing and concrtee finished surface on both sides etc and complete	:	Work done up to the billed quantity and Quality is satisfactory
E-4	KSRRB 300-49. Scarifying bituminous course 50mm to 75mm thick along with premix carpet / surface dressing by manual means without disturbing the base and stacking of the debris materials including cost of all labour charges complete as per specifications. MORTH / Chapter 3	:	Work done up to the billed quantity and Quality is satisfactory
E-5	KSRRB M300- Construction of Embankment with Material Gravel/ Murrum. KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300 -2 complete as per	:	Work done up to the billed quantity and Quality is satisfactory
E-6	KSRRB M400-6.1. Construction of granular sub-base by providing close graded crushed	:	Work done up to the billed quantity and Quality is satisfactory

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For CIVIL AIM CONSULTANTS & ENGINEERS

Authorised Signatory

Sunitha. N R
AE WD

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Vidyaranyapura Sub-Division
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